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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,892	08/04/2000	Joseph D. Lichtenhan	38559-257945(6565-03)	1993
27498	7590	12/31/2003		
PILLSBURY WINTHROP LLP 2475 HANOVER STREET PALO ALTO, CA 94304-1114				
EXAMINER ROBERTSON, JEFFREY				
ART UNIT		PAPER NUMBER		

1712

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/631,892

Applicant(s)

LICHTENHAN ET AL.

Examiner

Jeffrey B. Robertson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-32, 46-72, 86-98, 114-116 and 118 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-28, 30, 31, 46-52, 56, 57, 59-66, 70, 71, 86-92, 97, 114-116 and 118 is/are allowed.
- 6) ☒ Claim(s) 29, 32, 53-55, 58, 67-69, 72, 93-96 and 98 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 29, 32, 53-55, 58, 67-69, 72, 93-96, and 98 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claims 29, 32, 53, 58, 67, 72, 93, and 98, applicant has not shown support for the definitions of R" and X' in the specification. The specification, on page 6, lines 4-25 does not set forth the definitions for the variables set forth in the claims. It is noted that claims 68 and 69 are not listed in the current copy of the claims. The examiner has included them in this rejection based on the previous versions of the claims, which depend from claim 67.

### ***Response to Arguments***

3. Applicant's arguments filed 9/29/03 have been fully considered but they are not persuasive. Regarding the rejection made under 35 U.S.C. § 112, first paragraph, applicant argues that the references to R" and X' in the claims and specification are well

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defined, well known, and easily understood by those of ordinary skill in the art.

Applicant has not defined these variables in the specification and there is no evidence on the record that supports this assertion. Evidence that may be sufficient to render support to applicant's assertions may be provided using for example, patents and non-patent literature such as textbooks or journal articles. Since there is no evidence of record, the rejection made under 35 U.S.C. §112, first paragraph is continued.

4. Regarding the rejection made under 35 U.S.C. § 112, second paragraph, the examiner has withdrawn this rejection in light of applicant's comments. Specifically, applicant argues that in light of the examples on pages 3-5 of the specification, and the disclosure on page 6, line 28 et seq., applicant would understand the meanings of m, n, p, and #. Applicant points to the disclosure of a POSS cage that may contain 4-18 silicon atoms, exemplary embodiments that are disclosed on page 6. The examiner agrees that given the nature of the POSS fragment three dimensional structural arrangement and the formulas given in claims 22, 46, 86, and 114, the m and n variables are discernable, and therefore the claims are not indefinite.

#### ***Allowable Subject Matter***

5. Claims 29, 32, 53-55, 58, 67-69, 72, 93-96, and 98 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first paragraph.

6. Claims 22-28, 30, 31, 46-52, 56, 57, 59-66, 70, 71, 86-92, 97, 114-116 and 118 are allowed.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

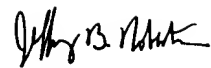
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Jeffrey B. Robertson  
Examiner  
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JBR



DANIEL S. METZMAIER  
PRIMARY EXAMINER

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